

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

06/18/07

17

UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
AM1562D1Total Pages in this Submission
4**TO THE ASSISTANT COMMISSIONER FOR PATENTS**Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON

and invented by:

JOAN WANGIf a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: 08/867,229

Which is a:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____

Which is a:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____

Enclosed are:

Application Elements

1. Filing fee as calculated and transmitted as described below
2. Specification having 13 pages and including the following:
 - a. Descriptive Title of the Invention
 - b. Cross References to Related Applications (*if applicable*)
 - c. Statement Regarding Federally-sponsored Research/Development (*if applicable*)
 - d. Reference to Microfiche Appendix (*if applicable*)
 - e. Background of the Invention
 - f. Brief Summary of the Invention
 - g. Brief Description of the Drawings (*if drawings filed*)
 - h. Detailed Description
 - i. Claim(s) as Classified Below
 - j. Abstract of the Disclosure

J639 U.S. PTO
06/15/0110978 U.S. PTO
09/882141
06/15/01

UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
AM1562D1

Total Pages in this Submission
4

Application Elements (Continued)

3. Drawing(s) (*when necessary as prescribed by 35 USC 113*)
 - a. Formal Number of Sheets 4 (3 in triplicate)
 - b. Informal Number of Sheets _____
4. Oath or Declaration
 - a. Newly executed (*original or copy*) Unexecuted
 - b. Copy from a prior application (37 CFR 1.63(d)) (*for continuation/divisional application only*)
 - c. With Power of Attorney Without Power of Attorney
 - d. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. Incorporation By Reference (*usable if Box 4b is checked*)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. Computer Program in Microfiche (*Appendix*)
7. Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all must be included*)
 - a. Paper Copy
 - b. Computer Readable Copy (*identical to computer copy*)
 - c. Statement Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts

8. Assignment Papers (*cover sheet & document(s)*)
9. 37 CFR 3.73(B) Statement (*when there is an assignee*)
10. English Translation Document (*if applicable*)
11. Information Disclosure Statement/PTO-1449 Copies of IDS Citations
12. Preliminary Amendment
13. Acknowledgment postcard
14. Certificate of Mailing

First Class Express Mail (*Specify Label No.:*) EL 434978454 US

UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
AM1562D1

Total Pages in this Submission
4

Accompanying Application Parts (Continued)

15. Certified Copy of Priority Document(s) (*if foreign priority is claimed*)
16. Additional Enclosures (*please identify below*):

Petition under 37 CFR 1.84 (b)(1)

Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)

17. Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

Warning

An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
AM1562D1

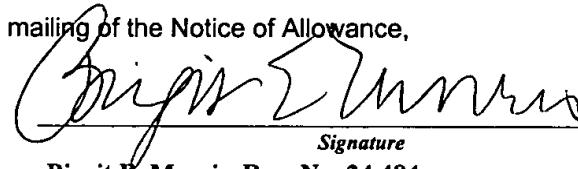
Total Pages in this Submission
4

Fee Calculation and Transmittal

CLAIMS AS FILED

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	6	- 20 =	0	x \$18.00	\$0.00
Indep. Claims	1	- 3 =	0	x \$80.00	\$0.00
Multiple Dependent Claims (check if applicable)	<input type="checkbox"/>				\$0.00
				BASIC FEE	\$710.00
OTHER FEE (specify purpose)					\$0.00
				TOTAL FILING FEE	\$710.00

- A check in the amount of _____ to cover the filing fee is enclosed.
- The Commissioner is hereby authorized to charge and credit Deposit Account No. 13-4542 as described below. A duplicate copy of this sheet is enclosed.
- Charge the amount of \$710.00 as filing fee.
 - Credit any overpayment.
 - Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
 - Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).



Birgit E. Morris
Signature

Birgit E. Morris, Reg. No. 24,484

5 Tall Timbers Drive

Princeton, NJ 08540

(609) 921-1695

Send all correspondence to

Patent Counsel, Applied Materials, Inc

PO Box 450A

Santa Clara, CA 95052

Dated: 6/15/2001

cc: J. Bach

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): JOAN WANG

Docket No.

AM1562D1

Serial No.
Div. of 08/867,229Filing Date
June 2, 1997

Examiner

Group Art Unit

Invention: **METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON**

I hereby certify that this Transmittal letter, in duplicate, filing fee charged to Deposit Account
(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

6/15/2001*(Date)*William R. Morris*(Typed or Printed Name of Person Mailing Correspondence)*William R. Morris*(Signature of Person Mailing Correspondence)*EL 434978454 US*("Express Mail" Mailing Label Number)*

Note: Each paper must have its own certificate of mailing.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): JOAN WANG

Docket No.

AM1562D1

Serial No.

Div. of 08/867,229

Filing Date

June 2, 1997

Examiner

Group Art Unit

Invention: METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON

I hereby certify that this Preliminary Amendment*(Identify type of correspondence)*is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on6/15/2001*(Date)*William R. Morris*(Typed or Printed Name of Person Mailing Correspondence)*William R. Morris*(Signature of Person Mailing Correspondence)*EL 434978454 US*("Express Mail" Mailing Label Number)***Note:** Each paper must have its own certificate of mailing.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): JOAN WANG

Docket No.

AM1562D1

Serial No.
Div. of 08/867,229Filing Date
June 2, 1997

Examiner

Group Art Unit

Invention: **METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON**

I hereby certify that this Specification (13pp), copy of Declaration and Power of Attorney
(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on
6/15/2001
(Date)

William R. Morris*(Typed or Printed Name of Person Mailing Correspondence)*William R. Morris*(Signature of Person Mailing Correspondence)*EL 434978454 US*("Express Mail" Mailing Label Number)*

Note: Each paper must have its own certificate of mailing.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): JOAN WANG

Docket No.

AM1562D1

Serial No.
Div. of 08/867,229Filing Date
June 2, 1997

Examiner

Group Art Unit

Invention: **METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON**

I hereby certify that this 4 pages of Drawing, 3 in triplicate, Petition under 37 CFR 1.84(b)(1)
(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on
6/15/2001
(Date)

William R. Morris*(Typed or Printed Name of Person Mailing Correspondence)*
*(Signature of Person Mailing Correspondence)*EL 434978454 US*("Express Mail" Mailing Label Number)*

Note: Each paper must have its own certificate of mailing.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): JOAN WANG

Docket No.

AM1562D1

Serial No.
Div. of 08/867,229Filing Date
June 2, 1997

Examiner

Group Art Unit

Invention: **METHOD OF ETCHING HIGH ASPECT RATIO OPENINGS IN SILICON**

I hereby certify that this **Information Disclosure Statement, Form 1449, references _____**
(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

6/15/2001*(Date)*

William R. Morris*(Typed or Printed Name of Person Mailing Correspondence)*

*(Signature of Person Mailing Correspondence)*

EL 434978454 US*("Express Mail" Mailing Label Number)*

Note: Each paper must have its own certificate of mailing.